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Subject Environmental Defense comments on  
Tetrahydrobenzaldehyde (CAS# 100-50-5)

(Submitted via Internet 5/18/05 to [oppt.ncic@epa.gov](mailto:oppt.ncic@epa.gov), [hpv.chemrtk@epa.gov](mailto:hpv.chemrtk@epa.gov),  
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Environmental Defense appreciates this opportunity to submit comments on the robust  
summary/test plan for **Tetrahydrobenzaldehyde (CAS# 100-50-5)**.

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The Dow Chemical Company, in response to EPA's High Production Volume (HPV) Chemical Challenge, has submitted robust summaries and a test plan describing available data for tetrahydrobenzaldehyde (THBA) (CAS # 100-50-5). According to the sponsor, THBA is manufactured in a closed batch process at only one facility and piped to another plant where it is used as a chemical intermediate. It may also be infrequently transported, approximately once every two years, to another plant where it is used as a chemical intermediate in the synthesis of a second product. According to the sponsor, measures necessary to limit exposure to the toxic and irritating precursors of THBA, butadiene and acrolein, are such that they effectively limit exposure to THBA as well. The sponsor further states that the low odor threshold of TBHA assures that occupational exposure will be detected prior to accumulation of toxic concentrations (though of course that does not necessarily prevent such exposures from occurring).

Our review of the test plan and robust summaries submitted for THBA indicate that it is a strong irritant, though it does not otherwise appear to be a highly toxic chemical. If the sponsor is correct in maintaining the chemical is a closed-system intermediate (for which we defer to EPA to make such determination), it appears to have low potential for release into the environment, and if released its reactivity should mean that it would not persist in the environment. THBA is not a data-rich chemical, but available data, much of it generated according to GLP standards, appear sufficient to address most SIDS elements required under the HPV Chemical Challenge. Only toxicity to algae and reproductive and developmental toxicity have not been addressed. The requirement for a determination of toxicity to algae has been adequately addressed by computer modeling. Given the strong irritant properties of THBA and assuming that it is confirmed to be a closed-system intermediate, we do not recommend further animal testing.

Thank you for this opportunity to comment.

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